

Title (en)  
ENERGY-EFFICIENT FILM

Title (de)  
ENERGIEEFFIZIENTER FILM

Title (fr)  
FILM ÉCO-ÉNERGÉTIQUE

Publication  
**EP 2923235 B1 20210707 (EN)**

Application  
**EP 13856805 A 20131118**

Priority  
• US 201261729166 P 20121121  
• US 2013070508 W 20131118

Abstract (en)  
[origin: US2014141192A1] An energy-efficient film is provided. The film includes a first transparent substrate, a second transparent substrate, a liquid crystal layer provided between the first transparent substrate and the second transparent substrate, and a gasket provided on an outer edge of the liquid crystal layer. The gasket may also be provided on outer edges of the first transparent substrate and the second transparent substrate.

IPC 8 full level  
**G02F 1/13** (2006.01); **B32B 17/06** (2006.01); **B32B 27/36** (2006.01); **E06B 9/24** (2006.01); **G02B 5/28** (2006.01); **G02F 1/133** (2006.01); **G02F 1/1339** (2006.01)

CPC (source: EP US)  
**B32B 17/10** (2013.01 - EP US); **B32B 27/36** (2013.01 - EP US); **E06B 3/6775** (2013.01 - US); **E06B 9/24** (2013.01 - EP US); **G02B 5/282** (2013.01 - EP US); **B32B 2307/42** (2013.01 - EP US); **E06B 2009/2464** (2013.01 - EP US); **Y10T 428/239** (2015.01 - EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 2014141192 A1 20140522; US 9341015 B2 20160517**; AU 2013348226 A1 20150709; CA 2892341 A1 20140530; CN 105074548 A 20151118; CN 105074548 B 20181102; EP 2923235 A1 20150930; EP 2923235 A4 20160803; EP 2923235 B1 20210707; IL 238955 A0 20150730; JP 2016506534 A 20160303; KR 20150109339 A 20151001; TW 201422427 A 20140616; WO 2014081653 A1 20140530; ZA 201504434 B 20191218

DOCDB simple family (application)  
**US 201314082570 A 20131118**; AU 2013348226 A 20131118; CA 2892341 A 20131118; CN 201380070410 A 20131118; EP 13856805 A 20131118; IL 23895515 A 20150521; JP 2015544093 A 20131118; KR 20157016615 A 20131118; TW 102142518 A 20131121; US 2013070508 W 20131118; ZA 201504434 A 20150619